

**THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE  
PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:**

1. A method of identifying drug targets for cancer therapy comprising:
  - (a) contacting a population of cells that express thymidylate synthase with an antisense oligonucleotide comprising at least 7 consecutive nucleotides complementary to a thymidylate synthase mRNA, wherein said antisense oligonucleotide modulates expression of thymidylate synthase, and
  - (b) identifying genes whose expression is modulated relative to control cells that have not been contacted with said antisense oligonucleotide, wherein said genes, or the gene products thereof, are potential drug targets for cancer therapy.
2. The method according to claim 1, wherein said antisense oligonucleotide increases expression of thymidylate synthase.
3. The method according to claim 2, wherein said antisense oligonucleotide comprises at least 7 consecutive nucleotides complementary to a portion of the thymidylate synthase mRNA that includes the translation initiation codon.
4. The method according to claim 1, wherein said antisense oligonucleotide increases expression of thymidylate synthase.
5. The method according to claim 4, wherein said antisense oligonucleotide comprises at least 7 consecutive nucleotides complementary to the 3'-UTR of the thymidylate synthase mRNA.